DOCUMENT RESUME

ED 426 204 CE 077 685

TITLE	Project Future Workplace Literacy Project. Final Performance Report.
INSTITUTION	Jefferson County Public Schools, Louisville, KY.
SPONS AGENCY	Office of Vocational and Adult Education (ED), Washington, DC. National Workplace Literacy Program.
PUB DATE	1998-05-00
NOTE	21p.; Project conducted in partnership with Futura Plastics and Engineering, Inc.
PUB TYPE	Reports - Descriptive (141) -- Reports - Evaluative (142)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Adult Basic Education; Adult Literacy; *Basic Skills; Cooperative Programs; Education Work Relationship; Institutional Cooperation; *Job Skills; Literacy Education; *Manufacturing Industry; *Outcomes of Education; Plastics; Program Evaluation; School Business Relationship; *Workplace Literacy

ABSTRACT

Project Future was a 3-year project begun in 1994 as a partnership between the Jefferson County Public Schools and Futura Plastics and Engineering, Inc., Louisville, Kentucky. The project targeted the workplace basic skills of plastic injection molding production workers. The skills classes improved the general education of the workers with instruction in mathematics, reading, writing, English (second language), workplace skills, and basic computer skills, tied to materials used in the workplace. Examples from home and family were also used in the classroom instruction. As a result of this project, a software program for basic skills training in the plastics industry and a basic skills curriculum guide were developed, and 348 plastics industry employees were trained. Project evaluation and the ability to serve the targeted number of participants were hampered by the transiency of the work force, employee layoffs, shift work, and the use of different instruments for pretests and posttests. Some evidence showed, however, that students who attended the classes improved their skills and were able to transfer their skills to the workplace. Having the classes in place allowed the company to recruit non-English-speaking employees that they would not have been able to employ otherwise. The greatest impact of Project Future seemed to be on long-term employees who took multiple classes, improved their skills in several areas, and were promoted to better jobs, benefiting both the employees and the company. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 426 204

PROJECT FUTURE
WORKPLACE LITERACY PROJECT

Conducted by
Jefferson County Public Schools and Futura Plastics
Louisville, Kentucky

FINAL PERFORMANCE REPORT

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

May, 1998

For More Information:
Jefferson County Public Schools Adult and Continuing Education
3670 Wheeler Avenue, Louisville, KY 40215
(502) 485-3400/Fax (502) 485-3609

BEST COPY AVAILABLE

CE 077 685

PROJECT FUTURE PERFORMANCE REPORT

May, 1998

For Further Information, contact:

JCPS Adult Education
3670 Wheeler Avenue
Louisville, KY 40215
(502) 485-3400 Fax: (502) 485-3609

Project Future Summary:

Project Future was funded in November 1994 by the US Department of Education as a Workplace Literacy Pilot Site. It was a partnership between the Jefferson County Public Schools (JCPS) Adult and Continuing Education Unit and Futura Plastics and Engineering, Inc., Louisville, Kentucky.

The project targeted the workplace basic skills deficits of plastic injection molding production workers. The skills classes improved the general education of the production workers with instruction in mathematics, reading, writing, workplace basic skills (such as communications and problem-solving), and basic computer skills contexted to the employee' workplace through use of forms, manuals, and other materials taken from the production floor. Because employees have personal learning needs that directly affect their ability to successfully maintain employment at Futura, examples from home and family, such as wage statements and insurance forms were also used in the classroom.

As a result of this project, a software program for basic skills training in the plastics industry and a basic skills curriculum guide were developed, and 348 plastics industry employees were trained.

Following are the goals and objectives of Project FUTURE, accomplishments, discrepancies between objective and actual accomplishments, and corrective measurements taken by staff and Oversight Committee in attempts to correct the slippage.

Goal 1: *To establish a working partnership between Jefferson County Public Schools (JCPS) Adult Education Unit and Futura Plastics and Engineering, Inc.*

Objective 1.1 *By October 1994, a Project Oversight Committee will be organized by representatives from JCPS and Futura Plastics.*

The Oversight Committee was established and worked intently to develop Project Future and promote it to the employees of Futura Plastics. The committee was composed of two representatives from Jefferson County Public Schools along with the program instructor, four partners from Futura Plastics and two external evaluators from the University of Louisville.

Objective 1.2 *By January 1995, project policies and procedures will be approved by the Project Oversight Committee.*

The Oversight Committee was formed in year one when policies and procedures for the project were established and approved. The marketing began in December and classes began in January 1995.

Changes were made in the Oversight Committee personnel as a result of restructuring within JCPS and Futura Plastics. These changes had been reported as they took place. As the project ended, the Oversight Committee consisted of the following:

Jeannie Heatherly	Project Advisor, JCPS
Bob Steel	Vice President and General Manager, Futura
Lyn Mattingly	Project Director, JCPS
Michael Price	External Evaluator, University of Louisville
Brenda Curry White	External Evaluator, University of Louisville
Bill Doherty	Quality Control Manager, Futura
Tony Greenhill	Production Foreman, Futura
Julia Bishop	Student, Administrative Assistant, Futura
Program instructor	JCPS

Decisions on issues such as scheduling, marketing, attendance policies, class content and other partnerships were made by the steering committee throughout the grant.

Objective 1.3 *By June 1995, June 1996, and June 1997, the project Oversight Committee will have met every three months and monitored the effectiveness of the program.*

The Oversight Committee met on a regular basis and was very influential in making decisions about the program. Examples of Oversight Committee influences are:

- additions and deletions of class sections
- marketing of classes
- additions of class sites
- rewards and recognition of students

Objective 1.4 *By September 1997, the project evaluator will have developed a Project Oversight Committee evaluation for each of the three years of operation and will present it to the committee each year.*

Reports from the first two years were completed and submitted by the external evaluator,

the Urban Studies Institute of the University of Louisville. The third year report is enclosed with this final report.

Goal 2 — *Implement a model delivery system for upgrading basic workplace literacy skills for plastics employees.*

Objective 2.1 — *By December 1994, Futura and JCPS staff will begin to actively promote the project among its employees.*

The marketing of this program to Futura Plastics employees was handled in a variety of ways. The Project Director was given free access to the employees and the plant floor. The Human Resource Director and the Project Director held orientations for all new Futura employees. The Project Director was invited to attend manager's meetings to promote and educate the managers about the project so that the managers could promote the project throughout their areas of specialty in the plant. Flyers and announcements were distributed, and the Project Director made personnel contacts in the break room. A company newsletter was developed to promote the project.

Objective 2.2 — *By June 1996, an interactive computer-based curriculum will have been developed for plastics' workers using Authorware.*

The computer-based curriculum was designed and produced especially for the plastics industry and was an intregal part of this project. It was field tested and reported to be an excellent source of study for the plastics industry. As of February, 1998, approximately 50 copies have been disseminated to programs throughout the United States.

Objective 2.3 — *By June 1997, Futura will have identified and referred to Project Futura 360 workers who potentially lack literacy skills needed for effective job performance based on the following incremental counts:*

Date	Projected Workers	Actual Workers
June 1995	120 workers	42
June 1996	120 workers	140
June 1997	120 workers	160
TOTAL	360	348

The actual numbers were slightly short of projected numbers. The discontinuance of transportation for students, and the increase in the number of temporary employees to fill short-term orders also resulted in a reduced number of participants. Top management turn-over, personnel downsizing and a change in operational direction had an impact on every aspect of the plant.

Objective 2.4 — *By June 1997, at least 300 workers will have received academic and job skills assessments, counseling and assistance in*

developing an Individual Education Plan based on the following incremental counts:

Date	Projected Workers	Actual Workers
June 1997	300 workers	319 workers

The goal of 300 was surpassed because of the addition of three sites in 1997: American Air Filter, Packaging Promotions and Flexible Materials. All these companies are plastics or related industries so benefited from the experiences gained at Futura.

Objective 2.5 *By August 1997, a workplace delivery system model for the plastics industry will have been developed, implemented, evaluated and disseminated.*

The workplace literacy delivery system was refined during the first two years of operation and evolved into an effective model. Various marketing methods were tested and refined; both worker and worksite assessments were implemented using the CASAS method along with instructor-made pre and post tests; the steering committee functioned effectively and both print and computer materials were developed. The materials were field tested in both Louisville and Bowling Green, KY plastics' plants. Additional companies were added to the site locations and the assessment, and instructional processes were continued in the other sites.

The curriculum materials were offered for distribution through a listing of providers gathered at a national workplace conference. Information about materials was submitted to the US Department of Education Workplace Literacy Office.

Goal 3 *To increase the workplace literacy skills of plastics workers employed at Futura Plastics.*

Objective 3.1 *By August 1997, 300 Futura employees will have participated in a comprehensive workplace literacy training program based on the following incremental counts:*

Date	Projected Workers	Actual Workers
August 1997	300 workers	319 workers

The goal of 300 was surpassed because of the addition of the three sites in 1997.

Objective 3.2: *By August 1997, 200 employees will have shown measured gains in the CASAS based on the following incremental counts:*

Date	Projected Workers	Actual Workers
August 1997	200	128

The number of employees showing gains on the CASAS did not reach the expected goal of 200. This is due to a variety of factors: the economy of the company, the turn-over rates of employees, layoffs, an increase in the number of workers used from temporary agencies such as Labor World, and extremely low rate of area unemployment. Additionally, as an assessment for a program of this type, CASAS is not as effective and appropriate as more recently developed instruments. The use of BEST for ESL students was very effective.

Objective 3.3: *By August 1997, 200 employees who use Basic Academic Skills of Employment (BASE) software will have shown measured gains based on the following incremental counts:*

Date	Projected Workers	Actual Workers
August 1997	200 workers	35 workers

BASE software was used initially; however, the program eventually transitioned into its own contextually developed materials. Therefore, the continuation of BASE was not appropriate. The software was still on computers and was used sporatically by individual students.

Objective 3.4: *By August 1997, 200 of Futura employees who participated in Project Future will have demonstrated improved job performance/job satisfaction as reported by Futura management and/or by the employees themselves based on the following incremental counts:*

Date	Projected Workers	Actual Workers
June 1995	50 workers	15
June 1996	50 workers	20
June 1997	50 workers	20
		55

A survey was given to the participants at the end of each class. The difficulty in accessing employees who left the program greatly affected these numbers. Anecdotal information given to the project staff indicated that employees and employers were very appreciative to Futura and the other sites for providing this opportunity for them.

Direct Services to Individuals:

All demographic information and outcomes are recorded in "Project Future: Year 3 Evaluation Report" which accompanies this program report.

Dissemination Activities:

Dissemination of project products is a critical part of a demonstration project, and Project Future has produced both cd rom and written curriculum which are contexted to the plastics industry. The dissemination activities are varied. The products from this project are being disseminated to interested educational institutions and businesses in the United States and Canada. Part of this list for dissemination was established at the National Workplace Conference, which was held in Milwaukee, WI in April of 1997. People attending this conference had the opportunity to sign up for a complete version of the products. Copies have been sent out to those requesting them. Copies are also being sent to the US Department of Education and to Futura Plastics. As of February 1998, over 50 copies of the curriculum have been distributed to organizations across the country. Additionally, copies of the curriculum have been presented to the Kentucky Center for Adult Education and Literacy in Frankfort, Kentucky.

Project Future has been very visible in the Jefferson County School System as well as in the community. The Oversight Committee reports have been shared, focus groups of students and employees of Jefferson County Public Schools were formed, the curriculum was edited by the external evaluator, the University of Louisville Urban Studies Institute external evaluators. The project was marketed to several companies in Louisville when recruiting students. It was also marketed to the Kentucky Society of Plactics Companies. The project has been included in several publications and was presented at six different conferences.

Evaluation Activities:

The University of Louisville Urban Studies Institute was contracted to evaluate Project Future. The evaluation was both formative and summative and is reported in "Project Future Year 3 Evaluation Report".

Changes in Key Personnel:

Changes in key personnel are as follows:

Project Director: Tommy Taylor, Charlene Brown, Lyn Mattingly
Futura Chief Operating Officer: Bob German, Bob Steele, Rick Loscalzo
Futura Human Resources Manager: Sharon Simpson, Tommy Taylor, Cindy McAlister

There were several changes in instructors; all were Kentucky Certified teachers.

Project Future
Year 3 Evaluation Report

by

Michael Price
Brenda Curry-White

Urban Studies Institute
University of Louisville
February 16, 1998

Project Future
Year 3 Evaluation Report

An evaluation of a National Workplace Literacy Project
in partnership between
Jefferson County Public Schools Adult Education Program
and Futura Plastics

prepared by
University of Louisville
Urban Studies Institute

Table of Contents

I. Introduction to Project Future 1

A. Worksite Description 1
B. Grant Description 2
C. Classroom Description 2

II. Recruitment and Retention in Year 3 3

A. Recruitment Strategies 3
B. Targeted Students versus Actual Students 3
C. Retention 4

III. Evaluative Measures 5

A. Student Demographics 5
B. Anecdotal Evidence 6
C. Workplace Measures 7
D. Partnership Issues 9

IV. Conclusions 9

Project Future

Year 3 Evaluation Report

Introduction to Project Future

Worksite Description

Futura Plastics is a local manufacturing firm. Most employees are in low-paid, semi-skilled jobs. Because these employees are responsible for operating large machinery used in creating plastics, there is a great need for basic math and reading literacy skills. For example, raw materials must be mixed in proper proportions to create plastic. If the proportions are incorrect, an entire mixture can be ruined. Employees need to understand math skills and be able to read and comprehend labels and instructions.

Futura Plastics takes advantage of a pool of employees from local social service agencies and provides them with a job and a ride to work. This is mutually beneficial, in that Futura has a constant supply of potential employees and the employees are able to find work. These employees tend to be some of those most in need of basic literacy skills. This pool of employees originally made Futura Plastics an attractive site to house a National Workplace Literacy Project. Over the three years of the grant, the employee pool has shifted somewhat. Although some employees still come from local social service agencies, an increasing proportion come from local immigrant populations for whom English is a second language. Many of these employees are in need of basic English skills, particularly for those skills necessary to understand and complete work assignments.

Grant Description

Futura Plastics and Jefferson County Public Schools entered into a three-year partnership sponsored by a grant from the U.S. Department of Education, and Futura became a National Workplace Literacy Project. JCPS agreed to provide on-site, job-specific literacy education. JCPS was responsible for organizing an oversight committee; providing instructional equipment and supplies; screening/assessing students; and training 200 individuals in mathematics, verbal and written skills, applied workplace skills, computer-assisted basic skills, and interpersonal skills. Futura Plastics agreed to provide space for the classes, encourage workers to attend, and provide incentive programs for students, including but not limited to cash bonuses for completing coursework. JCPS was to provide classes for each of the three work shifts at Futura. Part of the coursework was designed to use computers that JCPS would purchase from grant funds.

Classroom Description

The classroom at Futura Plastics is large enough for a class of approximately12 to 15 students with two tables in the center of the room and tables for the computers placed against the walls. Plenty of chairs are available. The classroom provides an atmosphere in which employees can be away from work while at work. It is designed to look more like a seminar room than a typical classroom so students do not feel threatened. There was some fear that because many of the employees at Futura are high school dropouts, they would be threatened by a room that looked like a school room. Every effort was made to make the room look and feel otherwise.

Recruitment and Retention in Year 3

Recruitment Strategies

Enrollment has been a problem in Project Future from Year 1 due to variations in production loads. A number of strategies to increase enrollment were suggested in the Project Oversight Committee meetings over the course of the grant. Graduation parties for students completing classes, company newletters featuring the program and participants, an open house with pizza, information posted about the program on the bulletin board in the break room, and informal involvement by the project director with staff have all been important in recruiting participants. Unfortunately, none of these strategies provided the project with long-term success in recruitment. The ability to learn about and use computers was the biggest draw for students. Nevertheless, job market volatility at Futura Plastics hurt attempts to recruit the projected number of students over the entire course of the project. The project director was working from a smaller base of employees in Year 2 than when the project started, and this base of employees remained relatively constant in Year 3, rather than increasing to Year 1 levels. To resolve this problem, other local companies were added as sites starting in Year 2 and continuing throughout Year 3, and basic skills courses were offered for those sites under the guidance of the Project Future oversight committee.

Targeted Students versus Actual Students

Although all Futura Plastics employees were encouraged to enroll in Project Future, it was originally thought that most students would come from the ranks of those hired from the social service agencies because they were most in need of literacy skills. After the first year, it was apparent that employees referred by social service agencies are more transient and less likely

to stay at the company long enough to make it through a cycle of classes. A significant number of students came from other sites or were long-term employees of Futura Plastics. After two years it was apparent that the goal of training 200 students could not be met at Futura Plastics alone, due to the change in staffing levels and employee transiency. To meet the goal, JCPS attempted to push enrollment during the final year of the grant by seeking increasing numbers of students from other sites. These students came from similar industries in the surrounding area. Some attended classes at Futura, and some received Project Future curricula instruction at their own worksites.

Retention

In each cycle, there were students enrolled who dropped out and did not complete the cycle, despite a $100 cash bonus for doing so. Transiency of employees was problematic for retention throughout the course of the project. Layoffs were a significant problem in Year 2, and employee turnover hurt attempts to retain students throughout all three years. The completion rate for all three years, including ESL courses, is 161 out of 317 students pretested, or 51%. However, looking at the completion rate as a proportion of the total number pretested does not account for the fact that the majority of students pretested left the company and were unable to complete the program. When students leave Futura either by choice or not, they also leave Project Future.

Although employees were provided a cash bonus for completing a cycle, they were not paid for time spent in class. Second shift classes were held before work; first and third shift classes were held after work. This presented the most problem for third shift workers, for whom working all night was hard enough and staying at work (and awake) an extra two hours for class

was a hardship. The alternative was to provide third shift with a late night class, but teachers were hard to find for those hours of the night. Given the time of class and the transiency of the third shift crew (the shift with the highest turnover rate), enrollment and retention of third shift students were very difficult. In fact, the third shift class was dropped in Year 2 and Year 3 due to lack of interest.

Evaluative Measures

Student Demographics

Project Future students were diverse in their demographic composition:

Demographics of Students

	Students Pretested	Students Completing Coursework
Gender		
Male	62%	58%
Female	38	42
Race		
Black	27%	32%
White	56	59
Hispanic	14	8
Other	3	1
Mean Age	35.7 years	37.1 years

Table 1

Students ranged in age from 19 to 63 years, with the mean aged 35.7. There were no significant demographic differences between those who were pretested and those who completed each cycle, although women were slightly more likely to complete than men.

Pretest and posttest scores for Year 2 cannot be taken as indicative of any meaningful change due to the different forms being used (the form used is dependent on the student's ability) and the addition of a new testing instrument in Year 3. However, on the whole, posttest scores were higher than pretest scores (see Figure 1). Of all the students posttested, 73% scored higher than on their pretest, whether it was a CASAS form, the BEST instrument, or the new test. The remaining 27% generally scored at the pretest level and did not score lower. However, this analysis gives no indication of how much higher those 73% scored on their posttests. None of those posttest scores may have shown a statistically significant rise.

Pretest vs. Posttest Scores

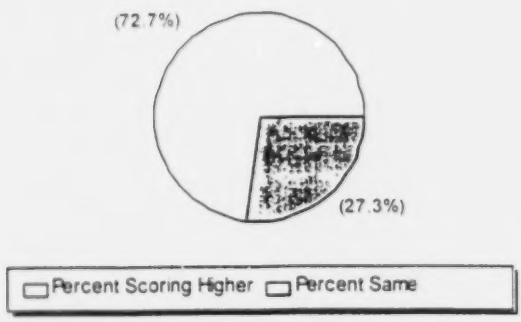

Figure 1

Anecdotal Evidence

Comments and observations provide a picture of what people think, feel and do as a result of Project Future. During one class, a student was working on a math problem and had a

calculator nearby. Although the problem was difficult for her, she refused to use the calculator because she wanted to learn how to do the calculation herself. "I want to learn something. I need to learn it myself!" she kept insisting. The desire to improve basic skills has been evident in all students. Students received individual attention and were able to work independently on projects suited to their own skill levels and literacy needs.

Employees who had attended Project Future classes and who completed the recruitment survey indicated that they attended primarily for self-improvement, to keep up with company changes or personal advancement (e.g., GED), and to learn about computers.

Workplace Measures

Project Future had some effect on Futura Plastics even though it was hard to measure. It is difficult to establish a clear picture of workplace skill levels both before Project Future started and after it was completed due primarily to three complicating factors: employee transiency, changes in employee composition and needs, and long-term employees taking multiple Project Future classes. Many employees did not stay at Futura long enough for workplace skills acquired in the program to carry over to their job. The changing needs of employees required a corresponding change in the structure of literacy courses in Project Future. Classes changed focus from basic English and mathematics skills to ESL, English, and mathematics skills. Many students liked Project Future so much that they kept returning to take more classes. This was a good example of the value students placed on the program, but it made comparing results across all types of students, including one-timers, difficult. All of these issues further complicate efforts to show clear cause and effect with regard to workplace outcomes. The only clear indication of acquired skills transferred to the workplace is in anecdotal examples.

Project Future has improved the skill base of some current employees. One student who was initially frightened to turn on the computer was eventually promoted to office staff due to the knowledge she gained in the use of computer spreadsheets. This student took multiple Project Future classes, and Futura Plastics recognized her drive and new abilities. Not only did the student gain skills and knowledge, but the company gained a more valuable employee.

Project Future offered the company a way to hire employees who might not have enough skills for the job when hired but who attain them through the program and thus enlarge the potential employee market. Recently, the city experienced an influx of Cuban refugees, many of whom desperately needed work. Even though many could not speak English, Futura hired them. Subsequently, they took ESL courses and basic literacy instruction, and they learned skills specific to the plastics industry while working. This was useful both to the students, who did not have to sacrifice wages while they learned skills and may have been unable to find employment elsewhere, and to Futura, which was able to hire employees it might not have been able to hire otherwise.

Project Future has been an experiment in workplace literacy education. Experimental research methodology dictates that nothing in an experiment change except for what is being tested--in this case Project Future. However, many things have changed at Futura since the program started. The employee pool has changed dramatically. Management at Futura has also changed, with the plant manager leaving and a new co-owner stepping into the management role. These changes have impacted the program and the ability to evaluate it's outcomes.

Partnership Issues

Despite management changes at Futura and three Project Future directors in three years, Futura Plastics has maintained a good working relationship with JCPS throughout the project. The oversight committee meetings fostered discussion, problem-solving, and new ideas for recruitment and retention. The oversight committee itself actually identified and recruited new project sites. The project directors spent many hours on-site at Futura working with students and non-enrolled employees, occasionally helping teachers with one-on-one instruction in classes.

By providing a class for supervisors and stretching the scope of instruction to include ESL, JCPS has proven to be very responsive to the changing environment at Futura Plastics.

Conclusions

Although little meaningful hard data can be collected due to the diversity of forms and skills assessments used during the three years of the project, anecdotal and other evidence seems to indicate that Project Future has helped some students learn basic literacy skills in a way that helps them perform their jobs better. Students most likely to show enhanced performance are generally long-term employees who return to Project Future more than once. At least for these students, new skills can translate into more valuable employees for Futura.

The partnership between JCPS and Futura Plastics was a strong one. By adding sites to Futura Plastics, JCPS came close to its goal of training 200 students in basic literacy skills (Project Future trained 161), and pretested as many as 317 students. It is unfortunate that workplace literacy programs are sensitive to economic forces affecting the labor market and transiency of employees. Project Future shows that such programs can potentially be effective

even in situations of high turnover and layoffs, although it is long-term employees with determination to complete more than one course who are most likely to benefit.